

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) ~~An electric power steering apparatus including an electric motor for applying a steering assist torque, corresponding to a steering torque, to a steering system, said electric motor comprising:~~ An electric power steering apparatus for a vehicle comprising:

a steering wheel of the vehicle;

front wheels of the vehicle;

a steering system applying steering torque from the steering wheel to the front wheels;

a steering assist mechanism exerting steering assist torque to the steering system, said steering assist mechanism including an electric motor coupled through a gear reduction mechanism to said steering system, said electric motor including means for minimizing inertia and for minimizing fluctuations in the steering torque as emanating from a cogging torque, said inertia minimizing and steering torque fluctuation minimizing means including:

an annular outer stator having circumferentially arranged nine salient poles radially arranged at an equal pitch, each of said salient poles having a stator winding wound there around; and

an inner rotor positioned within said outer stator and consisting of permanent magnets of eight poles magnetized radially arranged at equal pitch so that N and S poles are alternately arranged circumferentially;

said stator windings being connected as groupings such that they can be driven by electric power of three phases, each of said groupings comprising three poles of said stator windings which are positioned as every other one of said stator windings for said three poles, said stator windings in each grouping being connected in series.

2 - 5. (Cancelled)

6. (Previously presented) An electric power steering apparatus according to claim 1, wherein said inner rotor has a motor shaft on which said permanent magnets of eight poles are circumferentially arranged, said motor shaft having a solid form.

7. (Currently Amended) ~~An electric power steering apparatus including an electric motor for applying a steering assist torque, corresponding to a steering torque, to a steering system, said electric motor comprising:~~ An electric power steering apparatus for a vehicle, comprising:

a steering wheel of the vehicle;

front wheels of the vehicle;

a steering system applying steering torque from the steering wheel to the front wheels;

a steering assist mechanism exerting steering assist torque to the steering system, said steering assist mechanism including an electric motor coupled through a gear reduction mechanism to said steering system, said electric motor including means for minimizing inertia and for minimizing fluctuations in the steering torque as emanating from a cogging torque, said inertia minimizing and steering torque fluctuation minimizing means including:

an annular outer stator having circumferentially arranged nine salient poles radially arranged at an equal pitch, each of said salient poles having a stator winding wound therearound; and

an inner rotor positioned within said outer stator and consisting of permanent magnets of eight poles magnetized radially arranged at equal pitch so that N and S poles are alternately arranged circumferentially;

said stator windings being connected as groupings such that they can be driven by electric power of three phases, each of said groupings comprising three poles of said stator windings which are positioned adjacent to each other, said stator windings in each grouping being connected in series.

8. (Previously presented) An electric power steering apparatus according to claim 1, wherein said inner rotor has a motor shaft on which said permanent magnets of eight poles are circumferentially arranged, said motor shaft having a solid form.